DOCUMENT RESUME

ED 067 288 SE 014 881

TITLE	Consumer Math 3, Mathematics: 5285.23.
INSTITUTION	Dade County Public Schools, Miami, Fla.
PUB DATE	71
NOTE	17p.; An Authorized Course of Instruction for the Quinmester Program
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Behavioral Objectives; *Curriculum; Instruction; Mathematics Education; *Objectives; *Practical Mathematics; *Secondary School Mathematics; *Teaching Guides; Tests
IDENTIFIERS	*Quinmester Program

ABSTRACT

The third of four guidebooks in a non-sequential course of study for the General Math student, this booklet includes computation on personal income, income tax, and retirement income. General goals and overall strategies are given for the course, then performance objectives for computational skills and for specific topics are listed. A course outline, teaching suggestions, and sample pretests and posttests for each unit are included. For other booklets in this set, see SE 014 880 and SE 014 882. (DT)

ED 076887

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AUTHORIZED COURSE OF INSTRUCTION FOR THE QUINMESTER PROGRAM

DADE COUNTY PUBLIC SCHOOLS

Consumer Math 3

5285.23

Mathematics

DIVISION OF INSTRUCTION • 1971

ED 067288

QUINMESTER MATHEMATICS

COURSE OF STUDY

FOR

CONSUMER MATH 3

5285.23

PERSONAL INCOME AND TAXATION

(EXPERIMENTAL)

DIVISION OF INSTRUCTION
Dade County Public Schools
Miami, Florida 33132
1971-72

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PREFACE

The following course of study has been designed to set a minimum standard for student performance after exposure to the material described and to specify sources which can be the basis for the planning of daily activities by the teacher. There has been no attempt to prescribe teaching strategies; those strategies listed are merely suggestions which have proved successful at some time for some class.

The course sequence is suggested as a guide; an individual teacher should feel free to rearrange the sequence whenever other alternatives seem more desirable. Since the course content represents a minimum, a teacher should feel free to add to the content specified.

Any comments and/or suggestions which will help to improve the existing curriculum will be appreciated. Please direct your remarks to the Consultant for Mathematics.

All courses of study have been edited by a subcommittee of the Mathematics Advisory Committee.

CATALOGUE DESCRIPTION

One of four quins which will develop computational skills with non-negative rational numbers.

COURSE DESCRIPTION

A non-sequential course of study based on the book, Mathematics for Daily Living. Includes computation of personal income, income tax and retirement income. The course is designed to aid the student in developing computational skills as well as developing an understanding of federal and state tax forms, deductions required in personal income, and the benefits offered by Social Security. It is suggested that this course be offered in the second or third quin when interest in Federal Income Tax is high.

This course is designed for the General Math student with average or above average ability in math.

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GOALS

1. To develop skill in computation with percents and decimals.
2. To help the student become an intelligent consumer.
3. To develop an understanding of how earnings are computed, deductions are made, and taxes are levied.
4. To develop skill in the computation of payroll deductions, social security benefits, and income tax.

OVERALL STRATEGIES

Topic	Chapter
Personal Income	4
Income Tax	5
Retirement Income	11
Review of Skills	14

Mathematics for Daily Living by Harry Lewis is the basic text used, in which chapters 4, 5, and 11 comprise the core to be taught in Consumer Math 3.

A Skills Pretest/Posttest A is designed to be used as a diagnostic tool in helping the teacher assess the level of his class. For those classes scoring low on Pretest A, emphasis should be placed on the review of basic skills throughout the course. Classes with higher levels of skills ability will spend the greater part of their time on the applications found in the sections on personal income, income tax, and retirement income.

The Pretest/Posttest A is designed to be used at the end of the quin as well as at the beginning in order to assess the level of overall achievement attained by individual students and by the class as a whole.

PERFORMANCE OBJECTIVES

FOR COMPUTATIONAL SKILLS

The student will:

1. Perform operations with decimals.
2. Convert dollars to cents, and cents to dollars.
3. Write percents in their decimal form.
4. Write decimals in their percent form.
5. Write fractions in their decimal and percent forms.
6. Round decimals to a specified place.
7. Solve for an unknown term in a proportion.
8. Solve the three basic types of percent problems.

FOR SPECIFIC TOPICS COVERED IN CONSUMER MATH 3

The student will:

1. Compute earnings on an hourly basis, piece rate basis, and commission basis.
2. Compute payroll deductions with the use of standard charts.
3. Complete 1040 forms and state income tax forms.
4. Compute social security benefits with the use of tables.
5. Compute income from investments and annuities.

COURSE OUTLINE

I. Personal Income

- A. The hourly wage
- B. Piece rate wages
- C. Commissions
- D. Salaries

II. Income Tax

- A. Form 1040
- B. State income tax forms

III. Retirement Income

- A. Social Security benefits
- B. Other income

SUGGESTED STRATEGIES

A review of basic skills with percents and decimals may be necessary, based on the level of the class and their overall performance on the Pretest. The minimum requirements for the course are designed to increase the student's computational skills. The maximum requirements include an understanding of personal income, income tax, and retirement income.

I. Personal Income

1. Have students calculate their own earnings for a week, a month and the year, based on current jobs or their summer jobs.

2. Have students secure commission rate schedules for local department store salesmen, insurance salesmen and stock brokers.

3. Compare salaries of persons paid by commission to the salaries of clerks and professionals.

II. Income Tax

1. Secure 1040 forms for the entire class and complete sample forms together. Discuss reasons to use itemized deductions rather than taking a standard deduction.

2. Fill out state tax forms as a class.

III. Retirement Income

1. Check actual Social Security benefits from Social Security office.

2. Invite a speaker to come out to speak on topics of interest: medical, disability, survivor insurance.

SKILLS PRETEST/POSTTEST A

1. a. $\begin{array}{r} 1.05 \\ \times\ 7.8 \\ \hline \end{array}$

   b. $\begin{array}{r} \$4.62 \\ \times .015 \\ \hline \end{array}$

   c. $89.44 \div 43$

   d. $31.04 \div 1.6$

   e. $.342 \div .77$ (to nearest hundredth)

   f. $53.24 + 107 + 4.872$

   g. $\$38.44 - \$28.74$

   h. $12000 - 8.73$

   i. $1.05 + 372.14 + 808.96$

   j. $27 - .508$

2. a. $9¢ = \$_____$ b. $\$.37 = _____¢$ c. $5.2¢ = \$_____$

3. Write as a decimal.

   a. 9% b. .4% c. $6\frac{1}{4}\%$

4. Write as a percent.

   a. .67 b. 2.14 c. $.02\frac{1}{4}$

5. Write as a decimal and a percent.

   a. $\frac{9}{20}$ b. $\frac{3}{4}$ c. $\frac{5}{8}$ d. $\frac{2}{9}$

6. Round off to the nearest tenth.

   a. 3.74 b. 18.09

   Round off to the nearest cent.

   c. \$4.4645 d. \$13.248

   Round off to the next higher dime.

   e. \$31.57 f. \$28.06

7. Find the value of n in each of the proportions.

a. $\frac{2}{n} = \frac{16}{11}$ b. $\frac{n}{8} = \frac{24}{5}$

Round the answer to nearest tenth.

c. $\frac{3}{25} = \frac{4}{n}$ d. $\frac{5}{12} = \frac{n}{49}$

8. a. What number is 29% of 150?

b. 18 is what percent of 70? (to the nearest tenth)

c. 9.2% of what number is 4.6?

SKILLS PRETEST/POSTTEST KEY

1. a. 8.19
   b. .0693
   c. 2.08
   d. 19.4
   e. .44
   f. 165.112
   g. $9.70
   h. 11,991.27
   i. 1182.15
   j. 26.492

2. a. $ .09
   b. 37¢
   c. $.052

3. a. .09
   b. .004
   c. .0625 ($.06\frac{1}{4}$)

4. a. 67%
   b. 214%
   c. $2\frac{1}{4}\%$ (2.25%)

5. a. .45 45%
   b. .75 75%
   c. .625 62.5%
   d. $.2\overline{2}\ldots$ $22\frac{2}{9}\%$

6. a. 3.7
   b. 18.1
   c. $4.46
   d. $13.25
   e. $31.60
   f. $28.10

7. a. 1.375
   b. 38.4
   c. 33.3
   d. 20.4

8. a. 43.5
   b. 25.7%
   c. 50

POSTTEST B

PERSONAL INCOME

1. Find the time-and-a-half rate if the regular hourly rate is $3.00.

2. What are your earnings if you work 40 hours at $2.75 per hour?

3. Find the commission on $500 if the commission rate is 18%.

4. What commission will Hank receive for $842 total sales if the commission rate is 20% of all sales over $750?

5. Use the table on p. 162 to answer the following questions:

   a. Single - earns $50.00 - no exemptions

      What will his deduction be?

   b. Married - earns $100.00 - claims two exemptions.

      What will his deduction be?

6. Use the table on p. 177 to find the Social Security tax on a weekly salary of:

   a. $103.90

   b. $145.32

INCOME TAX

1. What is the name of the government agency in charge of Income Tax?

   _____.

2. The form sent out with a statement of total earnings and income tax paid is the _____ form.

3. F.I.C.A. stands for _____.

4. The form for income tax is numbered _____.

5. List 3 deductions that can be itemized.

6. Determine the federal income tax to be paid by each of the following persons. Use the tax tables on page 190 and the tax surcharge table on page 192.

	Annual Income	Type of Return	Number of Exemptions	Base Tax
a)	3,540	Single	3	_____
b)	4,690	Joint	4	_____
c)	3,750	Single	1	_____

Surcharge Tax	Total Tax
_____	_____
_____	_____
_____	_____

RETIREMENT INCOME

1. What is meant by quarterly period in Social Security?

2. The largest amount from which Social Security deductions are taken is _____.

3. What are the primary benefits on the following average monthly earnings? (Use table on p. 433)

   a. $352 _____ b. $81 _____

4. What is the smallest primary benefit a person can receive under the Social Security law?

5. What is the largest primary benefit a person can receive under the Social Security law?

6. What are the survivor's benefits for a child under 18? (Use table on p. 440)

7. Determine the lump-sum death payment for each of the following primary benefits:

   a. $82 _____ b. $104 _____

8. Who is eligible for medicare?

9. How much will an employee have to contribute to a private retirement fund if he earns $5,420 and is a 21 year old male? (Use table on p. 449)

Contribution Rate	Contribution
_____%	_____

10. A private retirement plan purchased by an individual is called a(an) _____.

POSTTEST B KEY

PERSONAL INCOME

1. $4.50

2. $110.00

3. $90.00

4. $18.40

5. a. $7.89 b. $10.76

6. a. $4.99 b. $6.98

INCOME TAX

1. Internal Revenue Service

2. W-2

3. Federal Insurance Contributions Act

4. 1040 (or 1040A)

5. Any of the following:

   contributions, interest payments, taxes, accident or theft losses

6.

Base Tax	Surcharge Tax	Total Tax
181	7	188
241	0	241
462	46	508

RETIREMENT INCOME

1. The quarterly periods are:

   January - March
   April - June
   July - September
   October - December

   If you earn $50.00 in any quarter, you are credited a quarter toward your Social Security.

2. $7,800.00

3. a. $141.50 b. $58.80

4. $55.00

5. $218.00

6. 75% of the primary benefit

7. a. $246.00 b. $255.00

8. A person 65 or over, covered by Social Security, who pays $4.00 a month.

9.

% of Contribution	Contribution
4.80%	$260.16

10. Annuity